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(54) Title: NAC1 – A PLANT GENE ENCODING A TRANSCRIPTION FACTOR INVOLVED IN COTYLEDON AND LATERAL ROOT DEVELOPMENT

(57) Abstract

A novel gene, nacl, has been isolated from Arabidopsis. This gene encodes a protein (NAC1) which has been identified as a member of the NAC family. NAC1 shares a high amino acid sequence homology with other members of the NAC gene products in the N-terminus. Data show that NAC1 belongs to a newly identified family of transcription factors. NAC1 is involved in the regulation of cotyledon and lateral root development. Overexpression of the gene can lead to larger plants with larger roots and more lateral roots than in wild-type plants.

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